

382-17

BENJAMIN

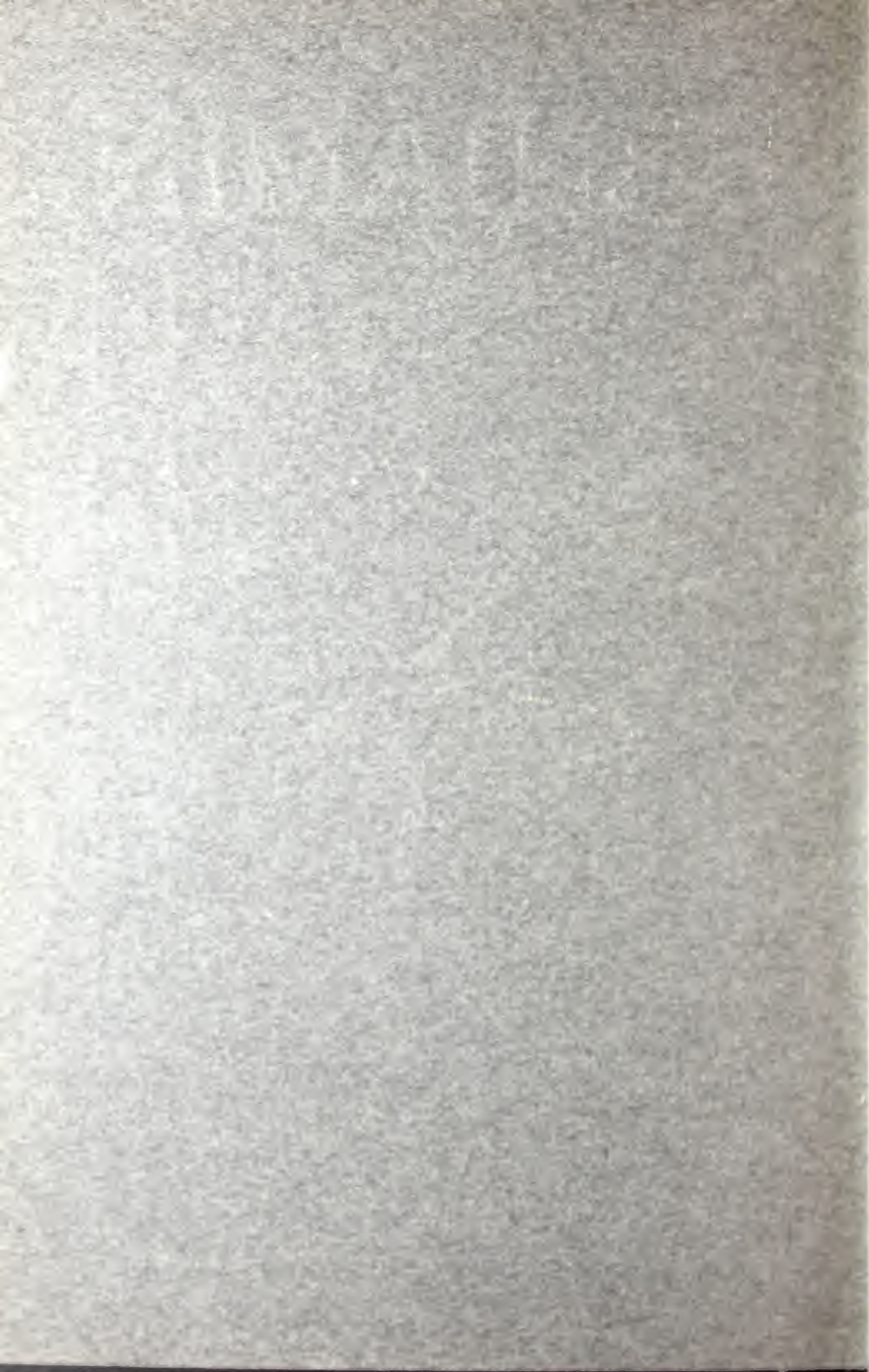
WIRELESS
CLUSTERS
& LIGHTING
SPECIALTIES



CATALOGUE B-15

Benjamin Electric Mfg. Co.

Main Office and Factory, 42 W. Jackson Boulevard, Chicago
Eastern Office, 37 Thames Street, New York



BENJAMIN WIRELESS CLUSTERS

DESCRIPTION



THESE clusters consist primarily of an insulating base of porcelain, two one-piece contact plates attached thereto (each serving like terminals of all lamps in the cluster and each provided with a binding screw) and a removable casing of brass or aluminum supported by porcelain rings or bushings of special design.

In doing away with the necessity of wires in the cluster body, by combining the necessary elements of sockets upon one base, the cost of installation is considerably reduced, both for ceiling and pendant forms, and a neat, strong, durable and well insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

BENJAMIN WIRELESS CLUSTERS,

in their multiple form, have been *APPROVED BY THE UNDERWRITERS' NATIONAL ELECTRIC ASSOCIATION.*

Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires no lining.

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard as the clusters.

These devices are covered broadly by numerous patents.

INSTRUCTIONS

In ordering, use number opposite price, which number indicates to us the number of lights desired as well as style of fixtures.

State whether Edison or T-H base is wanted, where clusters are listed in both bases, otherwise Edison base will be furnished.

State whether multiple or series clusters are wanted where both are listed.

All clusters and cluster fixtures (except weather-proof forms) will be finished in polished brass unless otherwise specified. Extra charge for all other finishes (see page 31).

Weather-proof forms are furnished with aluminum shells unless otherwise specified.

In ordering pendant fixtures, give length from crowfoot to tip of fixtures, otherwise fixture measuring twelve inches will be furnished.

Prices of fixtures do not include stem wires.

Goods are shipped at purchaser's risk, our responsibility ceasing when goods have been received in good order by transportation company.

This cancels all previous quotations.

Prices are subject to change without notice.

Parties unknown to us should remit with order, unless satisfactory references are furnished.

WALL BRACKETS

APPROVED

These wall brackets or angle sockets present a neat appearance and are easily connected.

They are made in one and two lights, and are especially adapted for attaching to side walls. Edison base only.

Fibre Lined

No. 18 measures $2\frac{1}{2}$ inches in diameter.

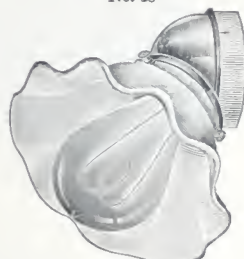
No. 19 " 3 " "



No. 18

Any shade of suitable size and form may be used with these sockets by using the Benjamin No. 245 $2\frac{1}{4}$ -inch shade holder, which is held firmly in position by the insulating socket ring.

Packed 12 in a box.



No. 18-O

No. 18	—1 light, socket only	\$0 65
No. 18-O	—1 light, with opal shade and holder	95



No. 19

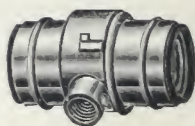
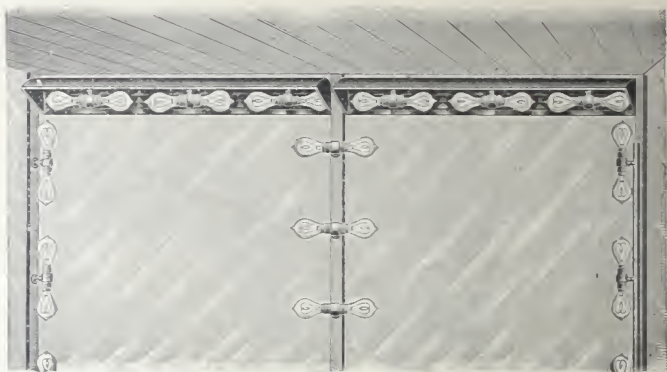


No. 19-O

No. 19	—2 light, socket only	\$1 00
No. 19-O	—2 light, with opal shades and holders	1 60
No. 245	—Shade holder	10

Prices are for polished brass finish.

SHOW WINDOW LIGHTING



BENJAMIN No. 4 TWIN SOCKETS

THESE sockets are designed to take two lamps, end to end, both being fed by *one set* of wires and being as easy to *connect* as single sockets. A *great saving* in both *time* and *material* is resultant from their use.

These sockets are fibre lined, and are furnished in both polished brass and nickel plated finish.

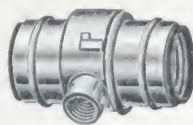
The ordinary *half pear* or *parabolic* reflectors can be used with these sockets, whereby any desired distribution of the light can be obtained.

You should specify these sockets for your *window reflectors*.

SHOW WINDOW LIGHTING—Continued

No. 4—Twin Socket, polished brass .	\$0 65
No. 4— “ “ nickel plated .	70
No. 81—Nipple, $\frac{3}{4}$ -inch, polished brass	10
No. 81— “ $\frac{3}{4}$ “ nickel plated .	12
No. 194—Flange, $1\frac{1}{4}$ -in. diam., pol. brass	05
No. 194— “ $1\frac{1}{4}$ “ nickel plated 07	

(50 in box)



No. 4



No. 81



No. 194



Something New

BENJAMIN TWIN SOCKET PLUG

(25 in box)

Fits any Edison base socket. Turns at any angle. Takes any standard shades. Shades can be rotated to any desired position.

If your show window is wired with individual sockets use this device and throw the light where it will show the goods to advantage.

	Without Shades	With Frosted Alum. Shades
No. 942— . . .	\$1 00	\$2 20



No. 942

Parabolic Shades for above.

Will fit any standard socket.

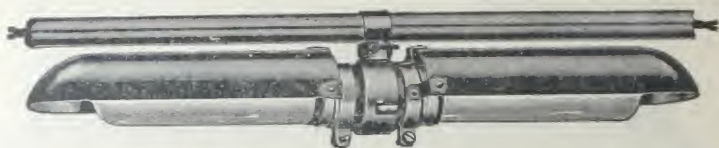
No. 27—Frosted aluminum	\$0 60
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No. 27

SHOW CASE LIGHTING

Benjamin Twin Sockets are simple, compact and durable—in short, the most suitable device known for show case work.



The above cut shows the No. 4 Socket attached to a brass tube by means of a special clamp. *No nipple is required*, thus leaving an extra large opening through which wires can be be looped and connections made without taps.



This cut illustrates the No. 4 Socket with a special adjustable fitting so constructed as to fit wall, moulding or the rail on inside of a show case. The fitting permits socket to be placed in any desired position.

SHOW CASE LIGHTING—Continued



No. 4

Socket with Clamp.

Wires can be looped into socket.

	Nickel Plated	Pol. Brass
No. 4—Socket only	\$0 70	\$0 65
No. 4—Clamp only	30	25
No. 4—Socket with clamp and shades	2 60	



No. 4

Socket with Hinge Support.

	Nickel Plated	Pol. Brass
No. 4—Hinge support	\$0 30	\$0 25
No. 4—Socket complete with shades and hinge support	2 60	

No. 4 Sockets are fibre lined and approved



No. 21

No. 21—Nickel-plated half shade	\$0 80
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No. 21 1/2

No. 21 1/2—Nickel-plated half shade	\$0 80
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No. 353

	Nickel Plated	Pol. Brass
No. 353—1/4-inch brass tubing, per foot	\$0 35	\$0 30

Extra for drilling wire openings, 5c each list.

Sockets put up 50 in box.

BENJAMIN WIRELESS CLUSTERS

CEILING FORMS

APPROVED - FIBRE LINED

These clusters are made in three sizes as follows:

- No. 8—2½-inch diameter, 2 light only, Edison base only.
 No. 2—3 " " 2, 3 and 4 light, Edison base only.
 No. 1—4 " " 2 to 6 light, Edison and T.-H. base.
 No. 7 is same as No. 1 with switch added, Edison base only.

These clusters are adapted for stems by adding fittings listed with same.
 Clusters attach to ceiling with screws same as a wall socket.

The metallic shades shown on page 26 are made to fit on back of cluster and require no shade holders.



No. 8

Style No. 8 is made in 2 light Edison base multiple only, and measure 2½ inches in diameter.

With No. 38
Flange attached

No. 82—2 light Mult. (12 in box) \$1 00 \$1 10



No. 38

Back fitting for above, with screws attached :

No. 38 Flange, tapped for ⅜ inch iron pipe \$0 10

No. 8 Flange, tapped for ½ inch iron pipe 15



No. 8F

Style No. 2 measures 3 inches in diameter, and is made in Edison base only. Put up 12 in box.



No. 2

With No. 32
Flange attached

No. 22 —2 light Mult. . . \$1 25 \$1 35

No. 22½—2 light Series . . 1 30 1 40

No. 23 —3 light Mult. . . 1 50 1 60

No. 23½—3 light Series . . 1 60 1 70

No. 24 —4 light Mult. . . 1 75 1 85



No. 32

Back fittings for above, with screws attached:

No. 32 Flange, tapped for ⅜ inch iron pipe \$0 10

No. 2 Flange, tapped for ½ inch iron pipe 15



No. 2F

For Reflectors see page 26

CEILING FORMS—Continued

APPROVED—FIBRE LINED

Style No. 1 cluster is four inches in diameter and is made in both Edison and T-H base.

	(Six in box)	With No. 31 Flange Attached
No. 12 —2 light Mult.	\$1 50	\$1 65
No. 12½—2 “ Series	1 55	1 70
No. 13 —3 “ Mult.	1 75	1 90
No. 13½—3 “ Series	1 85	2 00
No. 14 —4 “ Mult.	2 00	2 15
No. 14½—4 “ Series	2 10	2 25
No. 15 —5 “ Mult.	2 25	2 40
No. 15½—5 “ Series	2 35	2 50
No. 16 —6 “ Mult.	2 50	2 65

Where it is desired to use a pendant switch simply punch out the center of the insulating bushing and pull in your cord. For pendant switch and 3-foot lamp cord add 85c to list price. Extra cord, 15c per yard.

Five amp. pendant switch \$0 70

Style K is like No. 1, with one light straight down. Approved—fibre lined.

	(Six in box)	With No. 31 Flange Attached
No. 13-K—3 light	\$1 80	\$1 95
No. 14-K—4 “	2 05	2 20
No. 15-K—5 “	2 30	2 45
No. 16-K—6 “	2 55	2 70

Style No. 7 is the same as No. 1. with indicating switch added. Recently improved. Edison base only. Approved. Requires no fibre lining.

	(Six in box)	With No. 31 Flange Attached
No. 72—2 light Mult.	\$2 50	\$2 65
No. 73—3 “ “	2 75	2 90
No. 74—4 “ “	3 00	3 15
No. 75—5 “ “	3 25	3 40
No. 76—6 “ “	3 50	3 65

Back fittings for styles Nos. 1, K and 7.

No. 31—Flange, tapped for 3/8-inch pipe	\$0 15
No. 1— “ “ “ 1/2 “	20
No. 1— “ “ “ 3/4 “	20

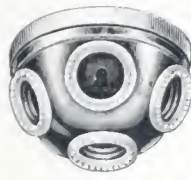
For Pendant Forms see pages 14 to 17.



No. 1



Style P



Style K



No. 7



No. 31



No. 1-F

CEILING FORMS—Continued

APPROVED

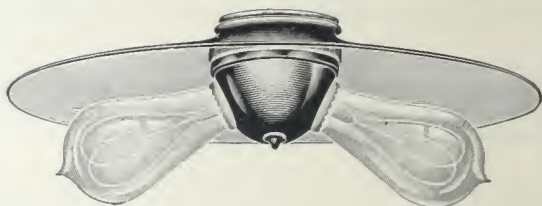


No. 223

Cluster with ceiling flange.

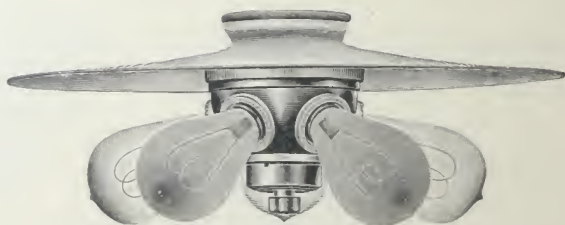
No. 222	-2 light Mult.						\$1 75
No. 222½	-2 " Series						1 80
No. 223	-3 " Mult.						2 00
No. 223½	-3 " Series						2 10
No. 224	-4 " Mult.						2 25

Cluster with metal sub-base for supporting opal shades close to ceiling. Shade is supported between rubber rings.



No. 322

		Less Shade	With 14-inch Opal Shade	With 16-inch Opal Shade
No. 322	-2 light Mult.	\$1 95	\$2 55	\$2 95
No. 323	-3 " "	2 20	2 80	3 20
No. 324	-4 " "	2 45	3 05	3 45
No. 315	-5 " "	2 95	3 55	3 95
No. 316	-6 " "	3 20	3 80	4 20



No. 375

With Indicating Switch Attached.

		Less Shade	With 14-inch Opal Shade	With 16-inch Opal Shade
No. 372	-2 light Mult.	\$3 20	\$3 80	\$4 20
No. 373	-3 " "	3 45	4 05	4 45
No. 374	-4 " "	3 70	4 30	4 70
No. 375	-5 " "	3 95	4 55	4 95
No. 376	-6 " "	4 20	4 80	5 20

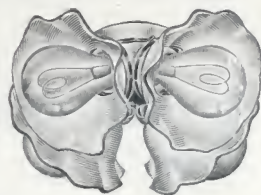
CEILING FORMS WITH INDIVIDUAL SHADES

MADE IN EDISON BASE ONLY.
APPROVED.

These clusters are same as those shown on pages 8 and 9, with No. 245 shade holders made specially for the purpose, and opal shades.

Any shades of suitable form may be used.

(Clusters packed 12 in box)



No. 24-O

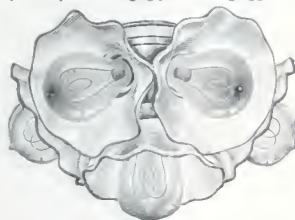
With fitting for
stem attached

No. 82-O-2 light Mult. with opal shades	\$1 60	\$1 70
No. 22-O-2 " " " " "	2 15	2 25
No. 23-O-3 " " " " "	2 70	2 80
No. 24-O-4 " " " " "	3 25	3 35
No. 12-O-2 " " " " "	2 10	2 25
No. 13-O-3 " " " " "	2 65	2 80
No. 14-O-4 " " " " "	3 20	3 35
No. 15-O-5 " " " " "	3 75	3 90
No. 16-O-6 " " " " "	4 30	4 45

Style KO consists of a style K cluster with opal shades for each lamp, and is very attractive.

The distribution of light is excellent.

(6 in box)



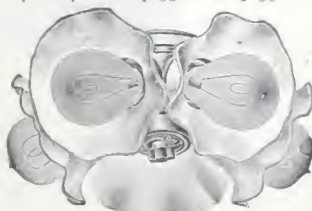
No. 16-KO

With fitting for
stem attached

No. 13-KO-3 light Mult. with opal shades	\$2 70	\$2 85
No. 14-KO-4 " " " " "	3 25	3 40
No. 15-KO-5 " " " " "	3 80	3 95
No. 16-KO-6 " " " " "	4 35	4 50

Style No. 7 cluster with opal shades, indicating snap switch at center of cluster.

(6 in box)



No. 75-O

With fitting for
stem attached

No. 72-O-2 light Mult. with opal shades	\$3 10	\$3 25
No. 73-O-3 " " " " "	3 65	3 80
No. 74-O-4 " " " " "	4 20	4 35
No. 75-O-5 " " " " "	4 75	4 90
No. 76-O-6 " " " " "	5 30	5 45

BENJAMIN WIRELESS CAR CLUSTERS

As they appear in service



An interior view of a St. Louis Transit Company's Car
equipped with Benjamin Car Clusters

The above named company is using several thousand
of these clusters in its cars

CAR CLUSTERS

STYLE No. 2

EDISON BASE ONLY.

Measures three inches in diameter and attaches directly to ceiling of car by means of wood screws.



Style No. 2

No. 22 $\frac{1}{2}$ -2 light series (12 in box)					\$1 30
No. 23 $\frac{1}{2}$ -3 " " " "					1 60

STYLE No. 1

EDISON AND T.-H. BASE.

Measures four inches in diameter and is adapted to be held to ceiling by three wood screws.



Style No. 1

No. 12 $\frac{1}{2}$ -2 light series (6 in box)					\$1 55
No. 13 $\frac{1}{2}$ -3 " " " "					1 85
No. 14 $\frac{1}{2}$ -4 " " " "					2 10
No. 15 $\frac{1}{2}$ -5 " " " "					2 35



Style No. 3

CLUSTER WITH METAL SUB-BASE

WITH RUBBER RINGS FOR HOLDING SHADE FIRMLY.

	With Sub-base	With 14-in. Opal Shade	With 16-in. Opal Shade
No. 322 $\frac{1}{2}$ -2 light series (12 in box)	\$2 00	\$2 60	\$3 00
No. 323 $\frac{1}{2}$ -3 " " " "	2 30	2 90	3 30
No. 314 $\frac{1}{2}$ -4 " " (6 in box)	2 80	3 40	3 80
No. 315 $\frac{1}{2}$ -5 " " " "	3 05	3 65	4 05

EXTRA CHARGE FOR DIVIDED CIRCUITS.

CLUSTER FIXTURES

APPROVED



No. 882

These pendant clusters are made up from the ceiling forms shown on pages 8 and 9, and consist of cluster body, back fitting, stem, crow-foot and canopy. Shade holders are furnished where Opal or X-Ray shades are specified. The other shades listed do not require shade holders.

Standard length is 12 inches over all.

Extra length stem, 30 cents per foot.

These fixtures are shipped knocked down.

Prices are for polished brass finish.

Style No. 8 body, 2½ inches in diameter.

Edison base only.

No. 882—2 light Mult.

No Shade or Holder	12-inch Shade			12-inch Shade and Holder	
	Tin	Mirror	Aluminum	Opal	X-Ray
	\$1 70	\$2 10	\$2 80	\$2 40	\$3 60



No. 824

When insulating joints are called for, a 4 inch by 4 inch canopy is furnished instead of canopy shown. for this change (including ¾ by ¾ inch insulating joint) add 75 cents to list price.

Style No. 2 body, 3 inches in diameter.

Edison base only.

	No Shade or Holder	14-inch Shade			14-inch Shade and Holder	
		Tin	Mirror	Aluminum	Opal	X-Ray
No. 822 —2 light Mult.	\$1 95	\$2 45	\$3 30	\$3 35	\$2 85	\$4 25
No. 822½ —2 " Series	2 00	2 50	3 35	3 40	2 90	4 30
No. 823 —3 " Mult.	2 20	2 70	3 55	3 60	3 10	4 50
No. 823½ —3 " Series	2 30	2 80	3 65	3 70	3 20	4 60
No. 824 —4 " Mult.	2 45	2 95	3 80	3 85	3 35	4 75

For Reflectors see page 26.

For Fixture Parts see pages 28 and 29.

CLUSTER FIXTURES—Continued

APPROVED

Notice that the porcelain cluster base forms an insulating partition between stem and cluster body.

Style No. 1 body,
4 inches in diameter.

Edison
or T-H base.



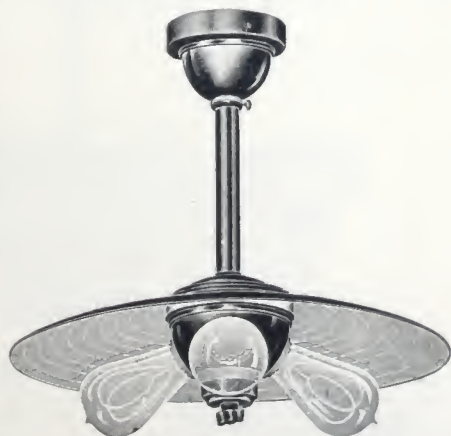
No. 816

	No Shade or Holder	14-inch Shade			14-inch Shade and Holder	
		Tin	Mirror	Alum.	Opal	X Ray
No. 812 —2 light Mult.	\$2 25	\$2 75	\$3 60	\$3 65	\$3 15	\$4 55
No. 812½—2 “ Series	2 30	2 80	3 65	3 70	3 20	4 60
No. 813 —3 “ Mult.	2 50	3 00	3 85	3 90	3 40	4 80
No. 813½—3 “ Series	2 60	3 10	3 95	4 00	3 50	4 90
No. 814 —4 “ Mult.	2 75	3 25	4 10	4 15	3 65	5 05
No. 814½—4 “ Series	2 85	3 35	4 20	4 25	3 75	5 15
No. 815 —5 “ Mult.	3 00	3 50	4 35	4 40	3 90	5 30
No. 815½—5 “ Series	3 10	3 60	4 45	4 50	4 00	5 40
No. 816 —6 “ Mult.	3 25	3 75	4 60	4 65	4 15	5 55

It is cheaper to use a cluster
with a switch attached than
to run wires to a switch on
the wall.

Style No. 7 body, 4 inches
in diameter.

Edison base only.
Recently improved.

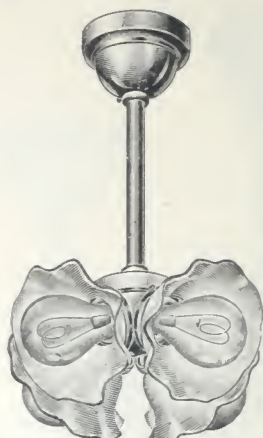


No. 873

	No Shade or Holder	14-inch Shade			14-inch Shade and Holder	
		Tin	Mirror	Alum.	Opal	X-Ray
No. 872—2 light Mult.	\$3 25	\$3 75	\$4 60	\$4 65	\$4 15	\$5 55
No. 873—3 “ “	3 50	4 00	4 85	4 90	4 40	5 80
No. 874—4 “ “	3 75	4 25	5 10	5 15	4 65	6 05
No. 875—5 “ “	4 00	4 50	5 35	5 40	4 90	6 30
No. 876—6 “ “	4 25	4 75	5 60	5 65	5 15	6 55

CLUSTER FIXTURES—Continued

APPROVED



No. 824-O

With No. 8 Body, 2½-inch diameter.

No. 882-O—2 light Mult. with opal shades . \$2 30

With No. 2 Body, 3-inch diameter.

No. 822-O—2 light Mult. with opal shades . 2 55

No. 823-O—3 “ “ “ “ “ 3 10

No. 824-O—4 “ “ “ “ “ 3 65

With No. 1 Body, 4-inch diameter.

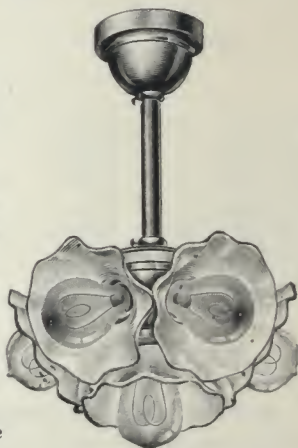
No. 812-O—2 light Mult. with opal shades . 2 85

No. 813-O—3 “ “ “ “ “ 3 40

No. 814-O—4 “ “ “ “ “ 3 95

No. 815-O—5 “ “ “ “ “ 4 50

Style KO is very effective
in both appearance and dis-
tribution of light.



No. 816-KO

No. 813-KO—3 light Mult. with opal shades \$3 45

No. 814-KO—4 “ “ “ “ “ 4 00

No. 815-KO—5 “ “ “ “ “ 4 55

No. 816-KO—6 “ “ “ “ “ 5 10

Cluster Fixture with Indicating Switch
attached.

No. 872-O—2 light Mult. with opal shades \$3 85

No. 873-O—3 “ “ “ “ “ 4 40

No. 874-O—4 “ “ “ “ “ 4 95

No. 875-O—5 “ “ “ “ “ 5 50



No. 875-O

For Shades see page 26

CLUSTERS

For Lighting Churches, Halls and Public Buildings

These Clusters are composed of a metal shell of neat design with openings in which are located porcelain lamp receptacles of special design. The receptacles are easily connected by means of binding screws inside of body. Any reflectors of suitable size can be used. Clusters are provided with 12-inch stems, crowfeet and canopies.



Style "A"

Style "A" takes a 5-8 inch Brass stem.

Style "B" takes a 1-2 inch Iron pipe and 1 inch Brass casing.

MADE IN EDISON BASE ONLY.

	Cluster Body Only.	Complete No Reflector.	Complete with 24 in. Plain Mir. Refl.	Complete with 24 inch Border Edge Mir. Refl.
No. 608A— 8 light,	\$5 00	\$5 65	\$10 15	\$13 65
No. 610A—10 light,	5 60	5 25	10 75	14 25
No. 612A—12 light,	6 20	6 85	11 35	14 85

Finished in Polished Brass. Extra charge for Special Finish.

For Aluminum Body instead of Brass, add 25c to List Price.

Extra Length Stem add 30c per foot to List Price.



Style "B"

EASILY WIRED

COMPACT
RELIABLE
ATTRACTIVE

MADE IN EDISON BASE ONLY.

	Cluster Body Only.	Complete No. Reflector.	Complete with 30 in. Plain Mir. Refl.	Complete with 30 inch Border Edge Mir. Refl.
No. 615B—15 light, 15 and 0, \$	8 00	\$8 95	\$16 15	\$19 95
No. 616B—16 light, 12 and 4,	8 40	9 35	16 55	20 35
No. 620B—20 light, 15 and 5,	10 00	10 95	18 15	21 95

Finished in Polished Brass. Extra Charge for Special Finish.

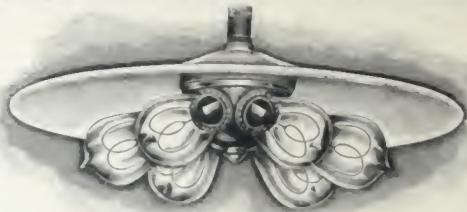
For Aluminum Body instead of Brass, add 25c to list price.

Extra Length Stem, add 45c per foot to list price.

WEATHERPROOF CLUSTERS

APPROVED

This type of cluster is specially suited for out door lighting and for mines, subways, etc., wherever the atmospheric conditions are detrimental to the ordinary type or form of cluster. The socket-shells are of copper, the casings of polished aluminum, and the cluster-back sealed by a flange tapped for $\frac{1}{4}$ -in. pipe and screwed directly on end of support, thus insuring security against ordinary forms of annoyances so prevalent to this class of work. The shades are heavy, well calculated to withstand hard usage and tapped for $\frac{1}{4}$ -inch pipe only.



		No. 40	
		No Pipe or Nipple is included	
No.	Flange and Shade		
42	—2 light Mult., No. 2 body		
42½	—2 " Series " 2 "		
43	—3 " Mult. " 2 "		
43½	—3 " Series " 2 "		
44	—4 " Mult. " 2 "		
44½	—4 " Series " 1 "		
45	—5 " Mult. " 1 "		
45½	—5 " Series " 1 "		
46	—6 " Mult. " 1 "		

15-inch White and Green Enameled Painted IRON
\$2 75
2 80
3 00
3 10
3 25
3 60
3 75
3 85
4 00

15-inch Porcelain Enameled STEEL
\$3 80
3 85
4 05
4 15
4 30
4 65
4 80
4 90
5 05

20-inch Porcelain Enameled STEEL
\$4 60
4 65
4 85
4 95
5 10
5 45
5 60
5 70
5 85



		No. 50	
		With Goose Neck, Fittings and Shade	
No.	Flange and Shade		
52	—2 light Mult., No. 2 body		
52½	—2 " Series " 2 "		
53	—3 " Mult. " 2 "		
53½	—3 " Series " 2 "		
54	—4 " Mult. " 2 "		
54½	—4 " Series " 1 "		
55	—5 " Mult. " 1 "		
55½	—5 " Series " 1 "		
56	—6 " Mult. " 1 "		
Weatherproof Shades only			

15-inch White and Green Enameled Painted IRON
\$3 65
3 70
3 90
4 00
4 15
4 50
4 65
4 75
4 90
1 50

15-inch Porcelain Enameled STEEL
\$4 70
4 75
4 95
5 05
5 20
5 55
5 70
5 80
5 95
2 40

20-inch Porcelain Enameled STEEL
\$5 50
5 55
5 75
5 85
6 00
6 35
6 50
6 60
6 75
3 20

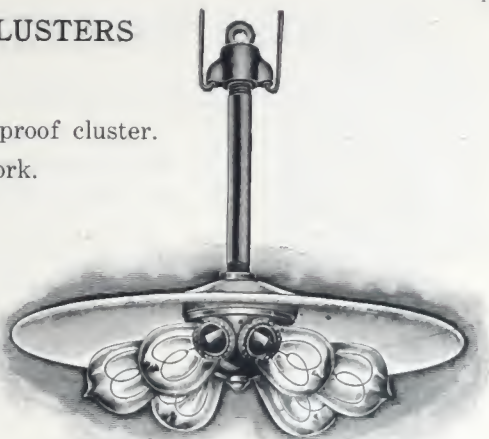
WEATHERPROOF CLUSTERS

—Continued

Another form of weatherproof cluster.
Designed for supension work.

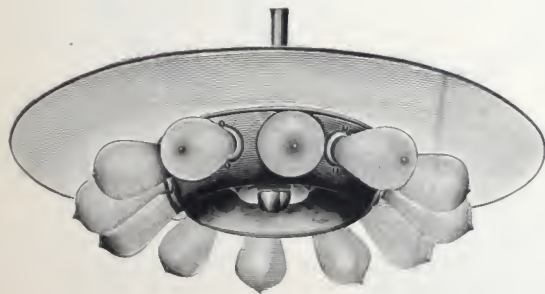
It is of the same *high class* construction used in our other forms.

These clusters are not required to be fibre lined for out-door lighting.



No. 60

No.	Nipple, Fittings and Shade					15-inch	15-inch	20-inch
						White & Green Enam. Painted IRON	Porcelain Enameled STEEL	Porcelain Enameled STEEL
62	—2 light	Mult., No. 2	body	.	.	\$3 25	\$4 30	\$5 10
62½	—2	Series, " 2	"	.	.	3 30	4 35	5 15
63	—3	Mult., " 2	"	.	.	3 50	4 55	5 35
63½	—3	Series, " 2	"	.	.	3 60	4 65	5 45
64	—4	Mult., " 2	"	.	.	3 75	4 90	5 65
64½	—4	Series, " 1	"	.	.	4 10	5 20	6 00
65	—5	Mult., " 1	"	.	.	4 25	5 35	6 15
65½	—5	Series, " 1	"	.	.	4 35	5 45	6 25
66	—6	Mult., " 1	"	.	.	4 50	5 60	6 40



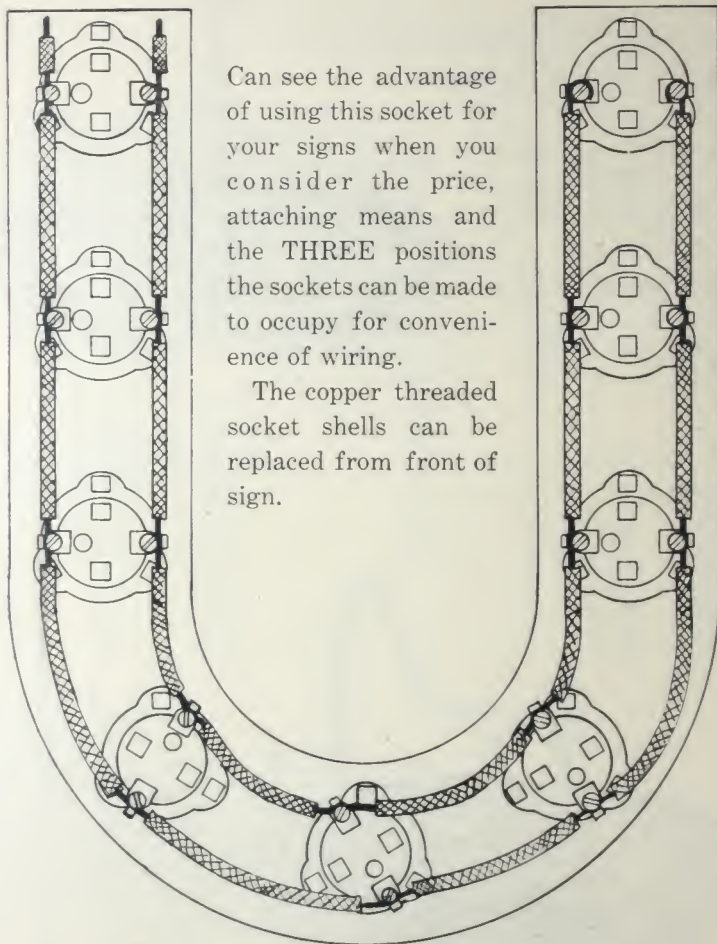
No. 612

The cut shows our No. 612 with the 20-inch porcelain enameled steel shade. The cluster has an aluminum casing with the No. 6 receptacles so arranged that they may be used for either parallel (multiple) or series work.

Easily wired.

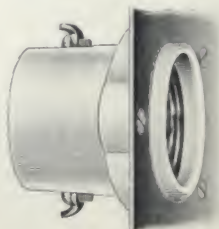
No.		Body only	Style 40	Style 50	Style 60
608—W. P.—8 light		\$ 5 00	\$ 8 20	\$ 9 10	\$ 8 70
610—W. P.—10		5 60	8 80	9 70	9 30
612—W. P.—12		6 20	9 40	10 30	9 90
615—W. P.—15		8 00	11 20	12 10	11 70
616—W. P.—16	(12 and 4)	8 40	11 60	12 50	12 10
620—W. P.—20	(15 and 5)	10 00	13 20	14 10	13 70

SIGN RECEPTACLES



Can see the advantage of using this socket for your signs when you consider the price, attaching means and the THREE positions the sockets can be made to occupy for convenience of wiring.

The copper threaded socket shells can be replaced from front of sign.



Sockets with Bolts Attached.

Put up 25 in Box.

Edison Base only.

No. 6-S

\$0 25

BENCO

The All-Weather Socket. Recently improved.

Consists of a One-Piece Porcelain Receptacle and a One-Piece shell of aluminum or brass, with opening tapped for $\frac{1}{2}$ -inch or $\frac{3}{8}$ -inch iron pipe or conduit.

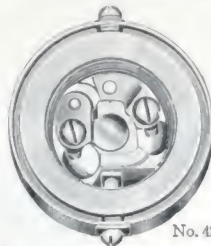
Wires can be looped in.

Binding screws are accessible from the front.

Used for street railway circuits (indoor and out), street lighting, in mines, factories, engine and boiler rooms, and in numerous places where wires are run in conduit and where unfavorable atmospheric conditions prevail.

	$\frac{1}{2}$ -inch	$\frac{3}{8}$ -inch
No. 420—With aluminum shell	\$0 60	\$0 60
No. 421—With brass shell	60	60

Packed 25 in a box.



No. 420

Benco with Porcelain Enam- eled Steel Shade.

These are the best combinations of weather-proof socket and reflector on the market, both reflector and socket being tapped for $\frac{1}{2}$ -inch pipe, and each forming a weather-proof joint with the pipe.

No. 41—Socket with 10-inch shade . . . \$1 80

No. 41½—Socket with 15-inch shade . . . \$3 00

No. 51—Pole fittings, std. goose neck, shade and Benco, as shown.

With 10-inch shade . . .	\$2 70
With 15-inch shade . . .	3 90
10-inch shade only . . .	1 20
15-inch shade only . . .	2 40

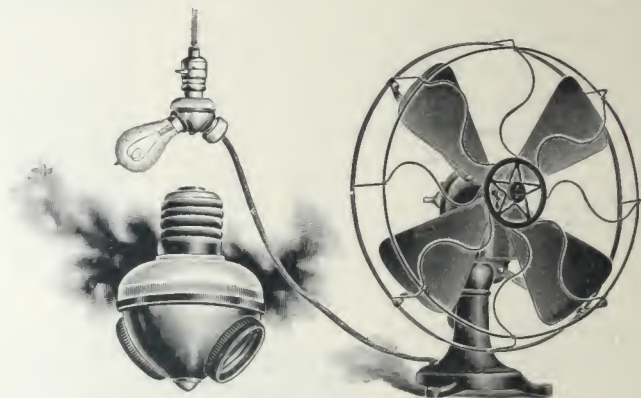


No. 41



No. 51

BENJAMIN WIRELESS RECEPTACLE PLUG



Fits any Edison base socket ; receives any combination of lamps and attachment plugs. By its use a one light pendant can be converted into a cluster. You will need one of these when you connect your fan. Packed 12 in a box.

No. 92	{	2 light Multiple	.	.	.	.	.	.	.	\$1 00
		2 light Series	.	.	.	.	.	.	.	1 10
No. 93		3 light Multiple	.	.	.	.	.	.	.	1 30
No. 94		4 light Multiple	.	.	.	.	.	.	.	1 60



No. 9

WALL BRACKETS

With crowfoot and canopy.
Polished brass finish, not wired.



No. 171

No. 171—1 light bracket only	\$1 20
No. 172—1 light bracket with keyless socket	1 50
No. 173—1 light bracket with key socket	1 55

Two light bracket,
Not wired.



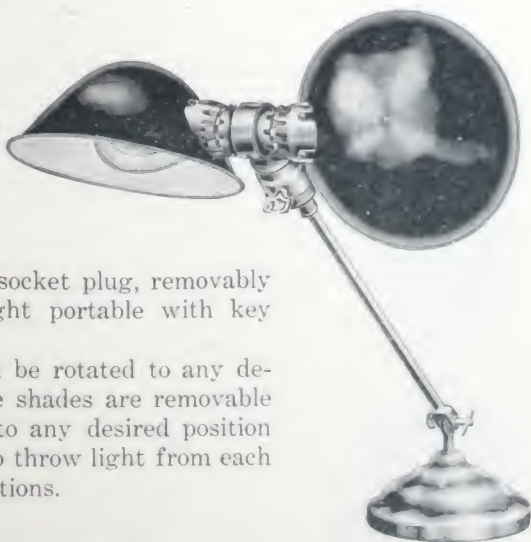
No. 174

No. 174—2 light bracket only	\$2 00
No. 175—2 light bracket with keyless socket	2 60
No. 176—2 light bracket with key socket	2 70

TWO LIGHT PORTABLE

Consists of a twin socket plug, removably attached to a one light portable with key socket.

The twin socket can be rotated to any desired position, and the shades are removable and can be adjusted to any desired position around lamps, so as to throw light from each lamp in different directions.

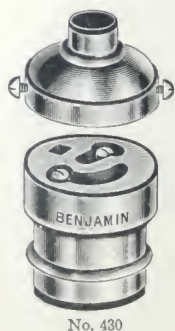


No. 942—Twin socket plug only	\$1 00
No. 943—Portable, complete, except shades	3 40
No. 944—Portable, complete, with aluminum shades	4 60

DROP LIGHT SOCKETS

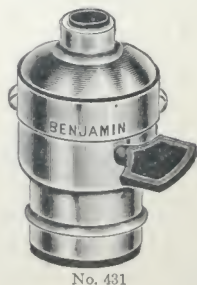
These sockets are designed for convenience of installation; the binding screws being located on the back side of the socket base. The cap is fiber lined, formed with a neck also fiber lined, with large opening to receive the lamp cord and sufficient space in cap to admit of a large knot being tied in cord. No threaded metal bushing in cap and therefore not necessary to use a composition bushing to insulate cord from shell. It is not necessary to remove lower shell in order to connect wires.

These sockets are intended for drop lights and you save cost of insulating bushing as well as labor in installing goods.



No. 430 is especially desirable for street railway circuits, owing to the form and size of opening in cap. Edison base only. Packed 50 in a box; 250 in a standard package.

No. 430—Keyless Sockets 30c each



No. 431 is a key socket similar in design to No. 430.

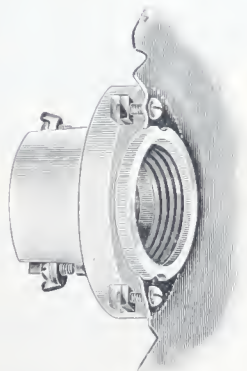
No. 431 packed 50 in box; 250 in a standard package; key socket 33c each

BENJAMIN RECEPTACLES No. 6

Intended to be attached to SHEET METAL SURFACES (flat or curved)
by means of bolts.

Just the thing for trough reflectors and metal ceilings, and is well adapted for special fixtures such as Spheres, Hemispheres and special forms of spun metal work. This Receptacle is used in the larger types of Benjamin Clusters. Put up 25 in a box with bolts attached.

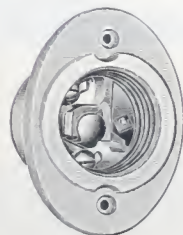
No. 6 Receptacle 25c



No. 6

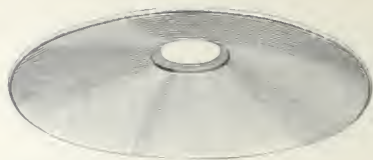
No. 6A is same as No. 6, except that terminals are located in the lamp opening, the wires can be looped into socket.

No. 6A—Receptacle 25c

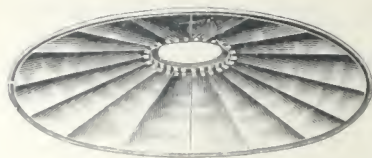


No. 6A

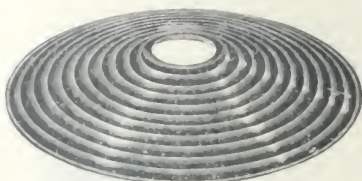
REFLECTORS



Tin



Mirror



Aluminum



Opal



X-Ray



Opal

No. 11

METAL REFLECTORS

Designed to fit on back of Benjamin Clusters and require no shade holders.
 No. 1 Reflector fits style No. 1 Cluster,
 (4-inch base.)
 No. 2 Reflector fits style No. 2 Cluster,
 (3-inch base.)
 No. 8 Reflector fits style No. 8 Cluster,
 (2½-inch base.)

TIN REFLECTORS

Enameled white and green.

	14-in.	16-in.	18-in.
No. 1	\$0 50	\$0 60	\$0 75
No. 2	50	60	75
No. 8	(12-inch only)		40

MIRROR REFLECTORS

No. 1	\$1 35	\$1 65	\$2 00
No. 2	1 35	1 65	2 00
No. 8	(12-inch only)		1 10

POLISHED ALUMINUM

No. 1	\$1 40	\$1 70	
No. 2	1 40	1 70	
No. 8	(12-inch only)		\$1 20

OPAL REFLECTORS

	2¼ inch Holder	12-in.	14-in.	16-in.	18-in.
No. 69	\$0 50	\$0 60	\$1 00	\$1 40	

Flat Opal.

X-RAY

Silver Plated Glass Reflectors. (1 piece)

	2¼-inch Holder	12-in.	14-in.	16-in.	18-in.
No. 660	\$1 70				
	3¼-inch Holder				
	14-in.	16-in.	18-in.		
	\$2 00	\$2 30	\$2 60		

OPAL SHADES

2¼x5 inches.
 Takes No. 245 Shadeholder.

\$0 20

SHADE HOLDERS

POLISHED BRASS FINISH

No. 243 is a regular $2\frac{1}{4}$ -inch
socket shade holder . . . \$0 10



Regular Socket Holder
No. 243

No. 245 is made to fit Benjamin
wireless clusters only, and is
held in position by the insul-
ating socket ring.

No. 245— $2\frac{1}{4}$ -inch, . . . \$0 10



No. 245

No. 247 is intended to slip a
stem and is made with both
 $\frac{5}{8}$ -inch and $\frac{3}{4}$ -inch slip.

No. 247 — $2\frac{1}{4}$ -in., $\frac{5}{8}$ -in. slip \$0 20

No. 247 $\frac{1}{2}$ — $2\frac{1}{4}$ -in., $\frac{3}{4}$ -in. slip 20



No. 247

No. 248 is a two-piece holder
and is made in both $\frac{5}{8}$ -inch
and $\frac{3}{4}$ -inch slip.

No. 248 — $3\frac{1}{4}$ -in., $\frac{5}{8}$ -in. slip \$0 30

No. 248 $\frac{1}{2}$ — $3\frac{1}{4}$ -in., $\frac{3}{4}$ -in. slip 30



No. 248

No. 249 is made in both $\frac{5}{8}$ -inch
and $\frac{3}{4}$ -inch slip.

No. 249 — $3\frac{1}{4}$ -in., $\frac{5}{8}$ -in. slip \$0 30

No. 249 $\frac{1}{2}$ — $3\frac{1}{4}$ -in., $\frac{3}{4}$ -in. slip 30

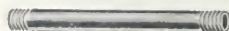


No. 249

FIXTURE PARTS—Continued

POLISHED BRASS

FIXTURE STEMS



No. 353

Made from $\frac{5}{8}$ inch brass tubing.

No. 353—Standard length 8-in. \$0 30

Extra length per foot, 30



No. 3174

STANDARD CANOPY

$4\frac{1}{2} \times 2\frac{1}{2}$ inches.

This canopy will cover when iron hickey or crowfoot is used.

No. 3174 — $\frac{5}{8}$ -inch slip \$0 25

No. 3174 $\frac{1}{2}$ — $\frac{3}{4}$ -inch slip, 25



No. 3329

DEEP CANOPIES

Are furnished where insulating joints are called for.

No. 3329 — $4\frac{1}{2} \times 4$ inch, $\frac{5}{8}$ inch slip, \$0 45

No. 3329 $\frac{1}{2}$ — $4\frac{1}{2} \times 4$ inch, $\frac{3}{4}$ -inch slip 45



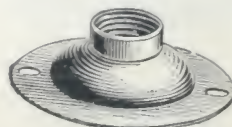
No. 184

FLANGES

This flange can be used with Cluster when back fitting is attached as shown top of page 10.

No. 184— $3\frac{1}{2}$ inch flange with $\frac{3}{8}$ inch male

thread, \$0 40



No. 194

This flange is used for the No. 4 Socket and is tapped for $\frac{1}{8}$ -inch iron pipe.

No. 194— $1\frac{1}{4}$ inch flange, tapped $\frac{1}{8}$ inch \$0 05



No. 81

NIPPLE

No. 81— $\frac{1}{8} \times \frac{3}{4}$ inch Nipple \$0 10

FIXTURE PARTS

IRON

All cluster fixtures are supplied with crow-feet unless otherwise specified. Crowfoot is tapped for $\frac{3}{8}$ -inch iron pipe and takes $\frac{5}{8}$ -inch brass stem.

No. 195 \$0 05



No. 195

Iron hickies are often used with Benjamin clusters instead of insulating joints, the porcelain base of cluster serving the purpose.

No. 1455 — $\frac{3}{8}$ x $\frac{3}{8}$ -inch . . . \$0 15

No. 1455 $\frac{1}{2}$ — $\frac{1}{2}$ x $\frac{3}{8}$ -inch . . . 20



No. 1455

Malleable iron insulating joint.

No. 1043 — $\frac{3}{8}$ x $\frac{3}{8}$ -inch . . . \$0 60

No. 1043 $\frac{1}{2}$ — $\frac{1}{2}$ x $\frac{3}{8}$ -inch . . . 80

Suspension fitting No. 60-S . . . 25

Nipple for above ($\frac{1}{2}$ x 8-in.) No. 60-N 25



No. 1043



No. 60-S



No. 50-G

Goose neck, made from three feet of $\frac{1}{2}$ -inch iron pipe.

No. 50-G—Painted black . . . \$0 60

No. 50-P—Pole fitting for above . . . 30



No. 60-N



No. 50-P

SOCKET RINGS

These rings are made especially for Benjamin clusters and receptacle plugs. They are made heavy enough to stand ordinary usage.



No. 10

No. 10 is made of high-grade porcelain.

No. 10 \$0 06

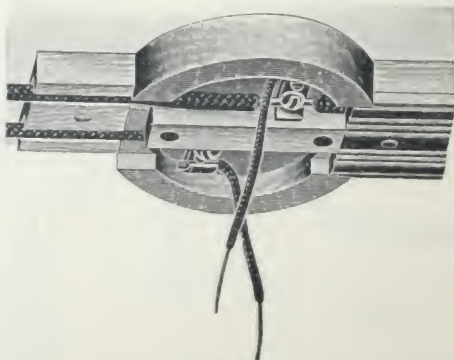
No. 10 $\frac{1}{2}$

No. 10 $\frac{1}{2}$ is made of a composition resembling hard rubber.

No. 10 $\frac{1}{2}$ \$0 04

PORCELAIN SUB-BASE

Can be used for either moulding or open wiring. This base measures three inches in diameter and takes style No. 2 cluster in 2, 3 and 4 lights. The leads attach directly to binding screws.



No. 284

No. 284—Mult., with leads attached \$0 30

No. 284 $\frac{1}{2}$ —Series, without leads or terminals (for railway circuit) 10

SPECIAL FINISHES

In placing orders for goods with other than standard finish (polished brass), it is desirable that you send, where possible, a sample of the finish wanted.

Old brass	. . .	add 5% to list.
Gilt	. . .	“ 5% “
Mottled copper	. . .	“ 10% “
Oxidized copper	. . .	“ 10% “
Wrought iron	. . .	“ 10% “

Other finishes quoted on application.



PHOTOGRAPH OF EXHIBIT AT LOUISIANA PURCHASE EXPOSITION
HELD AT ST. LOUIS, MO., U. S. A., 1904

**BENJAMIN WIRELESS CLUSTERS
AND
LIGHTING SPECIALTIES**

